

**United States
Department of
Agriculture**

**Natural Resources
Conservation
Service**

Meeting the Conservation Challenge In 1999



More than ever, the land – soil, water, air, plants, and animals – requires a voice to speak for its health and well being. The Natural Resources Conservation Service is the Federal Agency which speaks for the health and fate of America's private lands.

Our Vision:

Harmony between people and the land.

Our Mission:

To provide leadership in a partnership effort to help people conserve, improve, and sustain our natural resources and environment.

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Foreword

When you look out the window as you fly or drive across our country, conservation efforts on America's private lands are unmistakable.

This year, 1999, the Natural Resources Conservation Service and the Conservation Partners have helped nearly 1 million individuals to: improve productivity on nearly 17 million acres of cropland and grazing land; apply over 70 thousand miles of buffer strips that protect water quality and provide wildlife habitat; create or enhance at least 270 thousand acres of wetlands; and establish or improve over 100 thousand acres of forest land. These are just a few of the strides we've made to improve natural resource quality and productivity. The Natural Resources Conservation Service has also helped in the aftermath of natural disasters—restoring watersheds and helping people put their lives back together. We've worked to improve science and technology in natural resources conservation. We've focused on how we can better serve our customers and reached out to nontraditional customers and to underserved populations to improve program delivery.

We invite you to take a look at the highlights of what we have accomplished over the past year. These accomplishments are the result of the hard work and commitment of the Natural Resources Conservation Service staff, the Conservation Partnership, and millions of private individuals and thousands of communities across this Nation. We share a common bond of stewardship and caring for a healthy environment. Our work makes conservation happen on the land. Let's celebrate the great work that's been done to conserve natural resources this year and prepare to continue our efforts, ensuring that America's private lands are a model for the world.

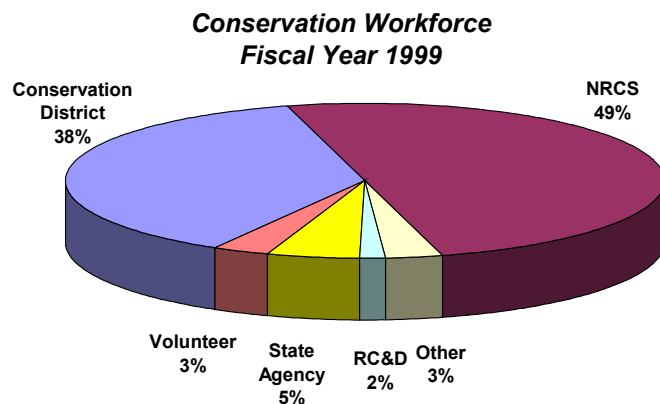
Our deepest appreciation and respect goes to each and every one of you who are dedicated to this challenge.

How We Work:

Approximately 75 percent of Natural Resources Conservation Service employees serve in USDA's network of local offices. These employees, who provide one-on-one technical assistance to the Nation's landowners and land users, include Conservationists, Soil Scientists, Agronomists, Engineers, Biologists, Technicians, and other important disciplines. The rest are at state, regional, and national offices; providing technology, policy, and administrative support.

the Natural Resources Conservation Service also relies on many partners who help set conservation goals, work directly with people on their land, and provide information and assistance to the public at large.

The Nation's 3,000 Conservation Districts are the heart of the conservation delivery system. These units of local government, organized by citizens under state law, operate on the premise that local people know the most about local conservation needs. They link the Natural Resources Conservation Service with neighbors and with local priorities. They also augment the work of the Natural Resources Conservation Service conservationists with district programs and with their own technical and support staff.



Source: NRCS, Workload Analysis

What We Do

Technical assistance provided by the Natural Resources Conservation Service and the Conservation Partners help farmers and ranchers develop conservation systems uniquely suited to their land and individual ways of doing business. We also provide assistance to rural and urban communities to reduce erosion, conserve and protect water quality, and develop economic and natural resources.

Customer Assistance

During fiscal year 1999, Natural Resources Conservation Service staff and our partners:

- Worked with 630,000 individuals to help plan and apply conservation systems and practices.
- Provided natural resource information and education to nearly 400,000 individuals.
- Assisted 8,348 members of Native American Tribes to identify resource problems and develop solutions.



Effective Land Management Starts With Conservation Planning

Conservation planning is a natural resources problem-solving and management process. The process integrates natural resource, economic, and social considerations to meet private and public needs. This approach, which identifies desired future conditions, improves natural resource management, minimizes conflict, and addresses problems and builds on opportunities.

The Natural Resources Conservation Service provides conservation planning and application assistance to individuals, groups, and units of government. With this assistance, clients develop and implement conservation plans to protect, conserve, and enhance natural resources (soil, water, air, plants, and animals) within their related social and economic interests.

The success of conservation planning and subsequent implementation depends upon the voluntary participation of clients. The objective in conservation planning is the sound use and management of soil, water, air, plant, and animal resources to prevent degradation and achieve natural resources sustainability. Sound planning is essential to a successful conservation program.



The Natural Resources Conservation Service uses a wide array of Program tools which help individuals and communities get conservation on the land. It all begins with our foundation Program, Conservation Technical Assistance:

Conservation Technical Assistance (CTA) supports a variety of our agency activities. Along with the basic conservation planning assistance that we provide to our customers, CTA also supports the technology development and transfer that provide the foundation of that assistance. The National Resources Inventories, Field Office Technical Guide development, Resource Assessments for Locally Led Conservation, training, Conservation Compliance, and ranking criteria development for EQIP applicants and other Farm Bill Programs are just a few examples of activities that are supported by CTA. Also, a number of special initiatives are funded by CTA such as the Grazing Land Conservation Initiative, American Heritage Rivers, and Salmon Recovery Initiative.

Watershed Protection & Flood Prevention works through local government sponsors and helps communities solve natural resource and related economic problems on a watershed basis.

Environmental Qualities Incentives Program (EQIP) Provides technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner.

Wetlands Reserve Program (WRP) A voluntary program to restore wetlands.

Soil Survey is a cooperative program between the Natural Resources Conservation Service, States, and Land Grant Universities under which the Nation's soils are mapped, described, interpreted, and digitized for public use.

Snow Surveys are conducted in the western states and Alaska for use in Water Supply Forecasting.

Conservation Reserve Program (CRP) encourages farmers to convert highly erodible cropland and other environmentally sensitive acreage to vegetative cover.

Resource Conservation and Development (RC&D)

improves the capability of State, tribal and local units of government and local nonprofit organizations in rural areas to plan, develop and carry out projects that balance economic, social, and natural resource objectives.

Wildlife Habitat Incentives Program (WHIP) provides financial incentives to develop habitat for fish and wildlife on private lands.

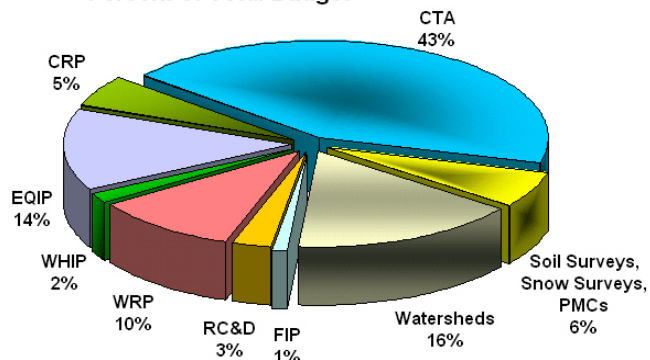
Forestry Incentives Program (FIP) supports forest management practices on privately owned, non-industrial forestlands, nationwide.

Grazing Lands Conservation Initiative (GLCI) ensures that technical, educational, and related assistance is provided to those who own private grazing lands.

Plant Materials studies and develops plants for conservation uses such as erosion control and wildlife habitat.

National Resources Inventory (NRI) is a statistically based sample of land use and natural resource conditions and trends on U.S. nonfederal lands. It is the most comprehensive database of its kind anywhere in the world.

**NRCS FY 1999 Programs,
Percent of Total Budget**



1999 Accomplishments Highlights

Achieving conservation – that state of harmony between people and land – requires a partnership among landowners, communities, and the land. That partnership is as varied as the Nation's landscape and as the people who call that local landscape home. The dynamic nature of agricultural and environmental systems means that conservation is a continuous process – one that is challenged to keep pace with natural resource conditions, land use, market forces, and production technology.

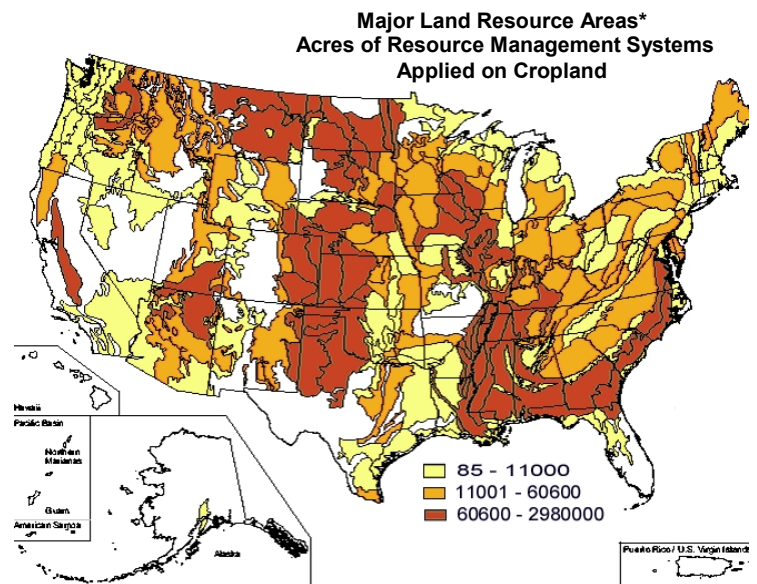
The following pages list our accomplishments for 1999 by the major resource concerns facing our private lands. While we recognize that breaking conservation into singular objectives and resource concerns is essential to effective planning and implementation, we also recognize that it is artificial. On the ground, where conservation happens, resources are forever linked. Soil resources are linked to water resources, and both are linked with grazing land, wetlands, and wildlife habitat. The real challenge for conservationists is to work with landowners and communities to bring all the pieces together on the landscape to achieve the larger vision of conservation – people in harmony with the land.

Resource Concern – Erosion and Sediment Control

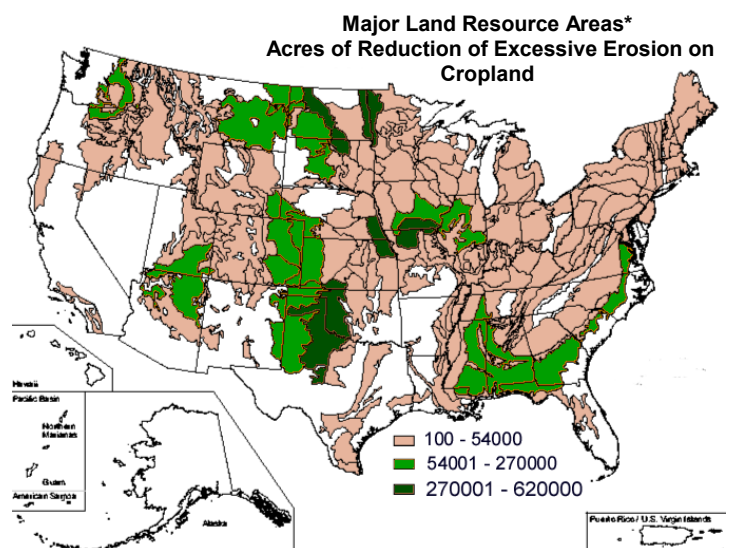
While we have cut erosion on cropland by 38 percent between 1982 and 1997, soil erosion continues to threaten agricultural productivity on about one-third of our Nation's cropland.

During Fiscal Year 1999, 8,680,000 acres of Conservation Plans were applied on Cropland to the Resource Management System level. At the Resource Management System level of conservation planning, we assist landowners with planning and applying a combination of conservation practices that treats all identified natural resource concerns in order to prevent natural resource degradation and permit sustained use.

The results of the application of these conservation plans and associated practices include 5,320,000 acres of cropland that were eroding above two times the soil's tolerable level are now protected against excessive erosion.



Source: NRCS, 1999 Performance and Results Measurement System



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*A Major Land Resource Area (MLRA) is a geographic area that is characterized by a particular pattern of soils, climate, water resources, land uses, and type of farming.

Conservation Buffers

Another benefit of the application of these conservation plans were the establishment of 73,400 miles of Conservation Buffers for water quality and wildlife. These buffers slow water runoff, trap sediment, and enhance water infiltration. They also trap fertilizers, pesticides, pathogens, and heavy metals, which minimizes the potential of these pollutants from reaching surface and groundwater. Conservation Buffers offer protection for livestock from harsh weather and provide valuable wildlife habitat.

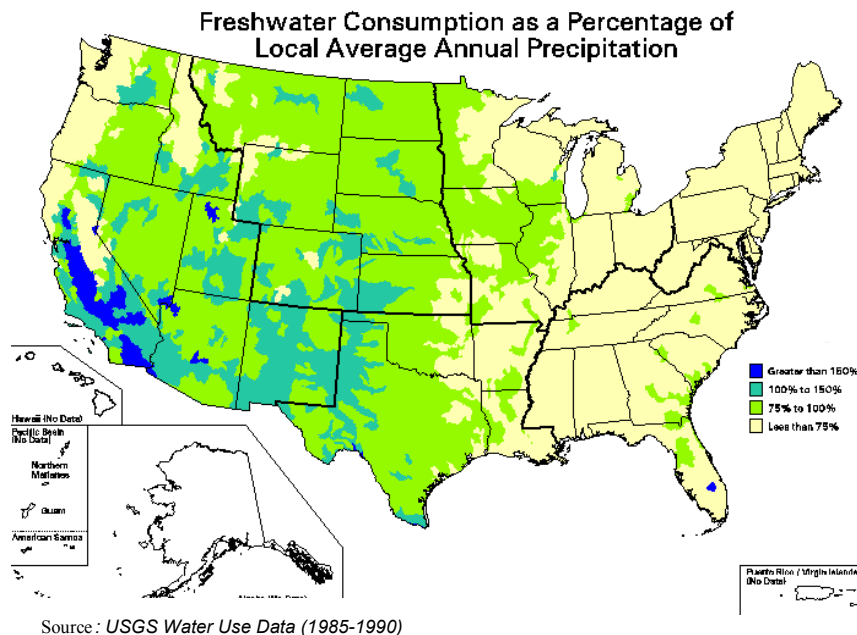
Conservation Buffer practices include:

- Alley Cropping
- Contour Buffer Strips
- Field Windbreaks/Shelterbelts
- Riparian Forest Buffers
- Filter Strips
- Grassed Waterways
- Streambank Protection
- Hedgerows
- Herbaceous Wind Barriers
- Cross Wind Trap Strips

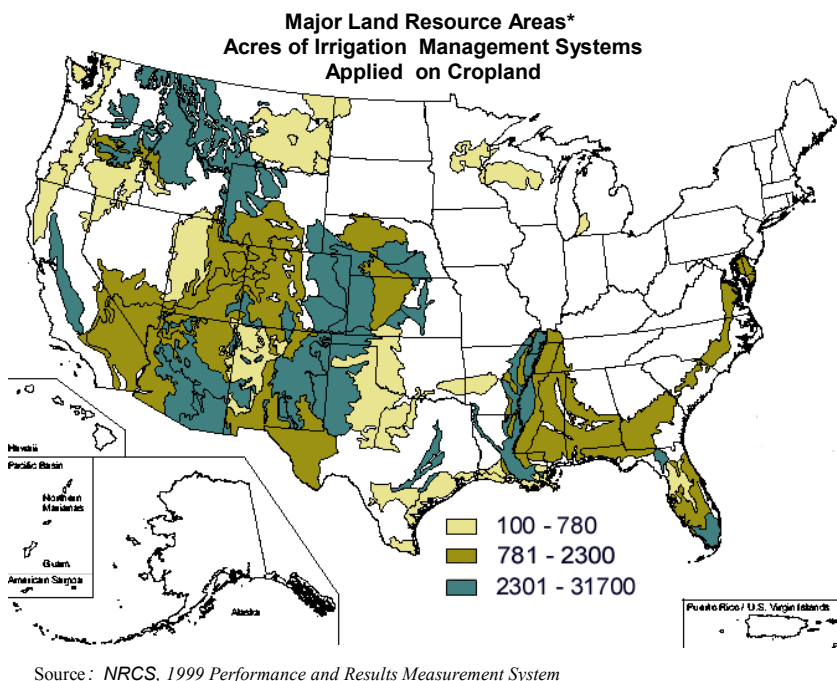


Resource Concern – Water Management

In states with substantial irrigated land, we face water shortages, groundwater depletion, and soil salinity problems. Water availability is a growing concern. 570 million acres have moderate to severe potential for accumulating salts in the soil.



Each year, water demand exceeds supply in the areas shown in blue. The green areas are beginning to experience water shortages.



Irrigators are adopting management practices that conserve water resources and reduce the potential for soil salinity buildup.

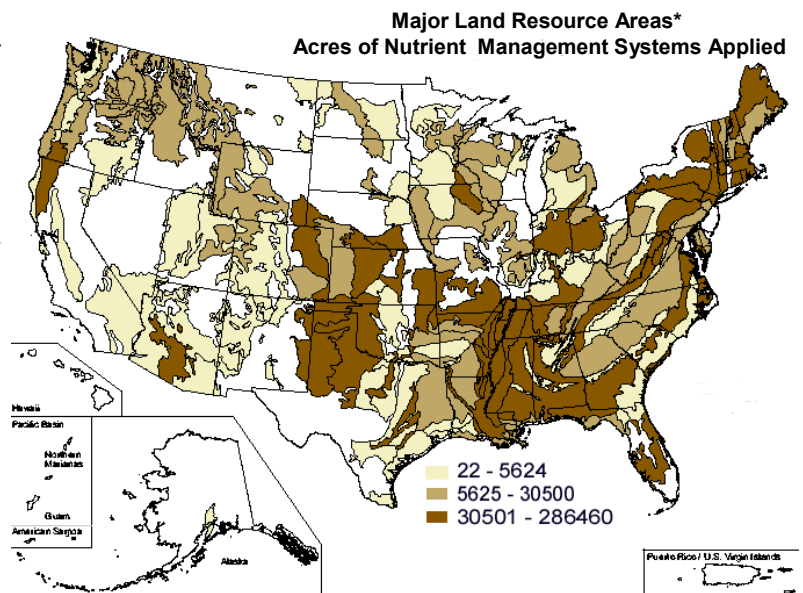
In 1999, with Natural Resources Conservation Service technical assistance, Irrigation Management Systems were applied on 198,200 acres of cropland, conserving an estimated 7,500,000 acre-inches of water per year.

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Resource Concern - Water Quality - Nutrient Management

Water quality continues to lead public resource concerns. Pesticides, fertilizers, and other pollutants degrade ground and surface water. Eroding streambanks muddy our rivers. Pfiesteria outbreaks along the Mid-Atlantic Coast and the Hypoxic zone in the Gulf of Mexico are thought to be tied to nutrient laden runoff. Nearly 300,000 animal feeding operations nationwide need assistance to manage manure nutrients.

During 1999, we assisted with the installation of 6,170 animal waste facilities such as Waste Storage Structures, Treatment Lagoons, Composting Facilities, and Roof Runoff Management in conjunction with other supporting conservation practices to control runoff and treat animal waste. In addition, we also assisted producers develop nutrient management plans on 2,700,000 acres. These plans help farm operators to budget and manage the amount, placement, and timing of the application of nutrients and other soil amendments. This allows crops to properly utilize manure or organic nutrient sources and minimize agricultural nonpoint source pollution



Source: NRCS, 1999 Performance and Results Measurement System

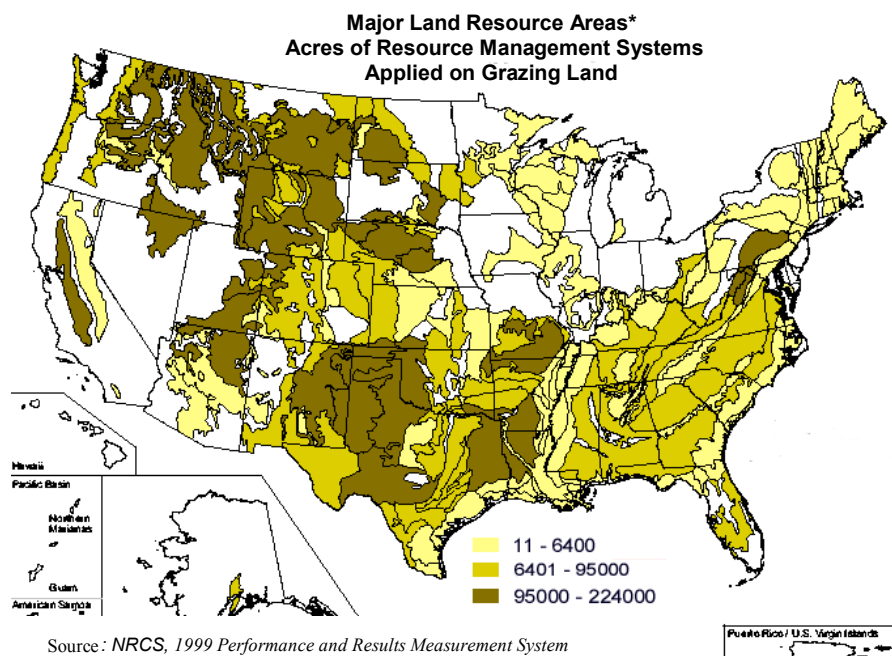
Resource Concern – Grazing Land

Privately owned grazing land, including pasture, rangeland and grazed forest land, covers over 583 million acres of the Nation. Pasture and rangeland alone amount to 35 percent of our country's non-Federal land. These extensive lands are significant for their agricultural value, as well as for their role as wildlife habitat.

However, grazing land functions are threatened – in some cases lost – on nearly 55 percent of our range and pasture.

Farmers and ranchers improved nearly 8 million acres of pasture and grazing land by implementing resource management plans - installing conservation practices such as prescribed grazing, range planting, and fencing. This results in:

- Better grazing land management
- Protecting soil from erosive wind and water
- Conserving water
- Providing habitat for wildlife
- Using plants to sequester greenhouse gasses and increase soil organic matter.



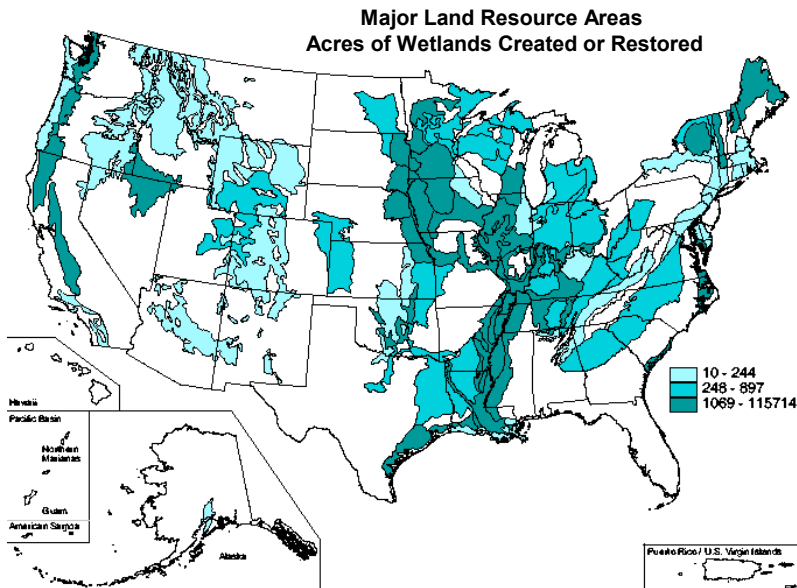
Source: NRCS, 1999 Performance and Results Measurement System

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Resource Concern – Wetlands, Fish and Wildlife

Wetlands provide vital wildlife habitat and help trap nutrients and sediment before they enter our streams, yet wetland challenges remain. Each year, 24,000 wetland acres per year that are converted to agricultural and urban land uses. However, landowners have begun to restore, protect, and enhance this resource. Since 1992, the net loss of wetland acreage on agricultural land has decreased dramatically.

With Natural Resources Conservation Service technical and financial assistance, we continue to reduce net losses. During 1999, wetlands were created or restored on 270,000 acres.



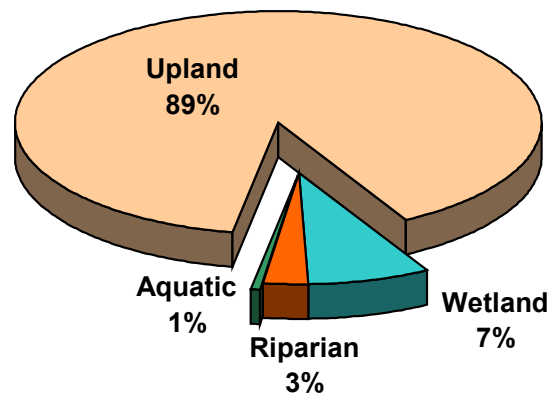
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Wildlife populations in some areas of the country, such as salmon stocks in the Pacific Northwest, are at risk. However, because landowners are restoring habitat on private land, wildlife is returning in many parts of the country. This year alone, Wildlife Habitat Management Plans were applied on 390,000 acres.



**Improving Wildlife Habitat in 1999 -
Distribution of Acres by Habitat Type**



Source: USDA, Natural Resources Conservation Service

The Natural Resources Conservation Service Strategic Plan and Annual Performance Report

The Natural Resources Conservation Service Strategic Plan is the foundation and backbone for all management, performance, and customer service activities for all levels of the agency. Natural Resources Conservation Service consistently strives to ensure that our day-to-day activities support the agency's mission and move us closer to accomplishing our strategic goals. The following table, from our Annual Performance Report, lists our 1999 Accomplishments based upon the Goals identified in our Strategic Plan.

Strategic Plan Goal	Performance Goals	Fiscal Year 1999 Performance Measures and Accomplishments
Goal 1: A healthy and productive land that sustains food and fiber production, sustains functioning watersheds and natural systems, enhances the environment, and improves urban and rural landscapes	Assist producers to plan and apply systems to protect and enhance cropland and grazing lands	Resource management systems applied on 8,680,000 acres of cropland 5,320,000 acres of cropland protected against excessive erosion. Resource management systems applied on 7,900,000 acres of grazing land
	Assist producers to plan and apply systems to protect water against agricultural nonpoint sources of pollution	2,700,000 acres of Nutrient management systems applied 6,170 Waste management systems completed Conservation buffers for water quality and wildlife 73,400 miles
	Assist local sponsors to plan and apply systems to protect watersheds against flood damages	Value of annual flood prevention benefits estimated at \$914,000,000
	Assist resource managers to plan and apply systems to protect or enhance wetlands	Wetland creation or restoration applied on 270,000 acres
	Assist resource managers to plan and apply systems to protect or enhance habitat for wildlife	Wildlife habitat management plans applied on 390,000 acres
	Assist resource managers to enhance forestland health and productivity	20,000 acres of Forest Stand Improvement completed Trees and shrubs established on 82,000 acres
Goal 2: Individuals and their neighbors working together as effective and willing stewards of the natural resources on their property and in their communities	Assist people living in communities to describe the conditions of the land and develop plans to address their resource concerns.	409 New locally led action plans were developed
Management Initiative 1: Provide high quality customer service	Treat all customers fairly and equitably	54,800 Minority clients received assistance
	Provide high quality service tailored to customers' needs	91% of our customers are satisfied with program delivery 92% of our customers are satisfied with service quality 630,600 Customers received planning and application assistance
Management Initiative 2: Improve quality and usefulness of Natural Resources Conservation Service Information	Make soils data available in a format that can be used as the foundation for integrated resources assessments	366 digital soil surveys available 2,611 customers accessed or downloaded soils data
	Provide accurate and timely information on water supply for western water resources managers	6,835 water supply forecasts issued Water supply forecasts used by 43,800 units of government, groups, and individuals 98% of water supply forecasts users are fully satisfied
	Develop and transfer plant science technology to help solve natural resource problems	Natural Resources Conservation Service Plant Material Centers released 22 new plants 720,000 customers used the Natural Resources Conservation Service Plants Database from website

